

## ABSTRACT

An optical data throughput protection switch is provided. The optical data throughput protection switch provides access to a data-carrying first optical path in a manner which also protects the data from interference from equipment utilizing said access, and provides for the elimination of optical connectors along the first optical path. The optical data throughput protection switch consists of a controllable switch and a controlling means, the controllable switch optically coupled to a first optical path carrying data throughput, and also optically coupled to the termination of a second optical path. The controllable switch is controlled by the controlling means and functions to enable and disable optical coupling between the termination of the second optical path and the first optical path. This may be controlled in such a manner that the controllable switch allows access to the first optical path when there is no data traffic on the first optical path, and denies access to the first optical path when data is present. The result is that the data throughput on the first optical path can be controllably protected from signals of the second optical path.